

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/29007

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 5/00, 5/02

US CL : 435/375

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/375

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,912,234 A (Ruoslahti et al.) 15 June 1999, whole document	1, 8-10
---		12-16
Y		12-14
Y	Holvoet S, et al. The inhibition of MAPK pathway is correlated with down-regulation of MMP-9 secretion induced by TNF alpha in human keratinocytes, 2003, Exp. Cell Res. vol 290, pages 108-119, particularly Abstract, figures 2 and 6	15-16
Y	Rotsch C et al. Drug-Induced changes of cytoskeletal structure and mechanics in fibroblasts: an atomic force microscopy study, January 2000, Biophysical Journal, vol 78, pages 520-535, whole document	1-18
A	Awad et al., In vitro characterization of mesenchymal stem cell-seeded collagen scaffolds for tendon repairs: effects of initial seeding density on contraction kinetics, 2000, J. Biomed. Mater. Res. vol 51, pages 233-240	1-18
A	US 4,940,893 A (Vandenburg) 10 July 1990	



Further documents are listed in the continuation of Box C.



See patent family annex.

### \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

19 March 2005 (19.03.2005)

Date of mailing of the international search report

05 MAY 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Patrick S. Riggins

Telephone No. (571) 272-1600

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US04/29007

Continuation of B. FIELDS SEARCHED Item 3:

BRS, PubMed/Medline

search terms: actin, microtubule, tissue engineering, extracellular matrix, cytoskeleton, nf, il1